. **ABSTRACT**

EFFECT OF VITAMIN E SUPPLEMENTATION ON LIPID PROFILE IN DISLIPIDEMIC PATIENTS

A Study On The Employees Of Professor Doctor Margono Soekarjo Hospital Purwokerto

Diah Krisnansari

The prevalence of dislipidemia in Indonesia increase lately. Vitamin E as the antioxidants have important role in increasing cholesterol metabolism, protecting Low Density Lipoprotein (LDL) cholesterol against oxidation and increasing level of High Density Lipoprotein (HDL). The aim of this study was to investigate the effect of vitamin E supplementation on lipid profile in dislipidemic patients.

The study was a Randomised Controlled Clinical Trial. Subjects were the employees of Professor Doctor Margono Soekarjo hospital, Purwokerto aged 30-50 years who suffered from dislipidemic with a minimal risks. All subjects (42 persons) were divided into 2 groups, supplementation and control groups. The supplementation groups received 400 IU vitamin E once a day for 30 days and the control group received placebo once a day for 30 days. Data on characteristics (age, sex and BMI) were collected through interview, weight and height measurement. Lipid profile was examined before and after supplementation by *vitros system chemistry analyser* 250 dan 350. Data on nutritional intake were gathered using food recall method and processed Nutrisurvey. Analysis were conducted by t-test, mann whitney, wilcoxon and chi square tests.

There was no difference in total (p = 0,910), LDL (p = 0,457) and HDL cholesterol levels (p = 0,809) as well as trigliseride level (p = 0,687) between the two groups before suplementation. There were differences in total (p = 0,004) and LDL cholesterol levels (p = 0,002) between the two groups after supplementation. There were no differences in HDL cholesterol level (p = 0,332) and trigliseride level (p = 0,940) between the two groups after supplementation.

In the supplementation group there were decreases in total (p = 0,017), LDL (p = 0,013) and trigliserida levels (p = 0,910). There was an increase in HDL cholesterol level (p = 0,002) in the supplementation group. In the control group there were an increases in total (p = 0,014) and LDL cholesterol levels (p = 0,000), but the HDL cholesterol level (p = 0,526) and trigliseride level (p = 0,823) were constant.

There were differences the changes in total (p = 0,001) and LDL cholesterol levels (p = 0,000) between the two groups. There were no differences the changes in HDL cholesterol level (p = 0,197) and trigliserida level (p = 0,438) between the two groups. There was no difference in nutritional intake between the two groups. It was concluded that supplementation of vitamin E 400 IU once daily for 30 days improve profile lipid in dislipidemic patients with minimal risks.

Keyword : dislipidemic, vitamin E, total cholesterol, LDL cholesterol, HDL cholesterol, trigliseride.